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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,817	04/24/2001	Erwin B. Bellers	US 010028	5944

24737 7590 12/29/2003

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, RICHARD J

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 12/29/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,817

Applicant(s)

Bellers

Examiner

Richard Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 22, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on Sep 22, 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 6) ☐ Other:

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 2, 4-6, 8-10, 12-14, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by de Haan et al of record ("True-Motion Estimation with 3-D Recursive Search Block Matching) for the same reasons as set forth in paragraph (5) of the last Office Action (see Paper no. 5).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 7, 11, 15, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Haan et al of record ("True-Motion Estimation with 3-D Recursive Search Block Matching) for the same reasons as set forth in paragraph (7) of the last Office Action (see Paper no. 5).

5. Regarding the applicant's arguments at pages 15-17 of the amendment filed September 22, 2003 concerning in general that "... The de Haan reference teaches a motion estimation algorithm ... the de Haan reference teaches an algorithm that calculates a displacement vector to

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move pixels to a new position in an intermediate field when performing a field rate up-conversion from a lower field rate to a higher field rate. Thus, the de Haan reference does not teach an enhancement unit enhancing a characteristics other than position, as recited in Claim 1 of the Application ...”, the Examiner respectfully disagrees. The spatial and temporal predictions of de Haan (see sections II and IV) involve motion estimation through the use of block matchings where the minimum summed absolute differences between blocks are calculated to select the best candidate block (i.e., with a corresponding best candidate vector indicating the best displacement offset, see second sentence of Section IV of de Haan). And by providing the best candidate block through the minimum SAD calculations, de Haan is providing the best estimated block image and as such it is submitted again that de Haan provides the same enhancement unit (i.e., estimators (a and b), see Section IV) enhancing a characteristic other than position of a selected pixel region of video information utilizing at least one candidate enhancement vector of enhancement algorithms to generate an enhanced pixel region for each candidate enhancement vector, as claimed. It is further noted that de Haan is interested in providing smoothness of images through spatial and temporal predictions by adding penalties to the error functions involved in block matching (see Section VI, pages 372-373). By smoothing the images, de Haan provides the same enhanced pixel region equivalent to enhancement of the selected pixel region utilizing a respective candidate enhancement vector of enhancement algorithms as claimed.

Regarding the applicant's arguments at pages 17-20 of the amendment filed September 22, 2003 concerning in general claims 2-20, the Examiner wants to point out that such arguments

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have been addressed in the above. The applicant is further reminded that: One of ordinary skill in the art is presumed to possess a certain amount of background knowledge independent of the references. In re Sovish, 769 F.2d 738, 226 USPQ 771 (Fed. Cir. 1985); In re Jacoby, 309 F.2d 513, 135 USPQ 317 (C.C.P.A. 1962). The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F.2d 1385, 163 USPQ 545 (C.C.P.A. 1969). With the above in mind, it is submitted again that one skilled in the art would certainly have no difficulty in recognizing the coefficients present within the candidate vector C of equation (26) of de Haan and that the penalties that are added to the error function as shown in equation (26) also varies based upon coefficients for each candidate enhancement vector within the equation for the same well known spatial and temporal smoothing purposes as claimed.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

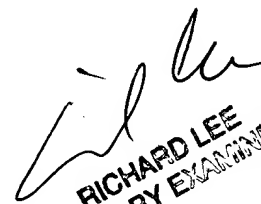
(703) 872-9314, (for formal communications; please mark "EXPEDITED
PROCEDURE") (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.


RICHARD LEE
PRIMARY EXAMINER

Richard Lee/rl

12/24/03

